

**PROCESS AND APPARATUS FOR THE PRODUCTION OF A  
TWO-COMPONENT COATING MIXTURE**

**ABSTRACT OF THE DISCLOSURE**

The invention relates to an apparatus for the production of a two-component coating mixture, in particular for the production of a an aqueous two-component polyurethane coating emulsion from an aqueous binder dispersion comprising isocyanate-reactive hydrogen atoms and a polyisocyanate, with a mixer for the production of the two-component coating mixture by mixing a first coating component and a second coating component and with a homogeniser for homogenisation of the two-component coating mixture, the homogeniser being downstream from the mixer. It is proposed that, in the outlet zone of the homogeniser, a return line branches off, which opens into the inlet zone of the homogeniser, in order to recirculate a portion of the two-component coating mixture homogenised by the homogeniser for rehomogenisation. The invention furthermore comprises a corresponding process and a substrate which is coated with a coating produced in corresponding manner.